

#### **LETTERS**

#### **NBS: State of Health**

The article by Gina Bari Kolata, "National Bureau of Standards: A fall from grace" (News and Comment, 2 Sept., p. 968) and the following response by F. Karl Willenbrock and Ruth M. Davis (Letters, 7 Oct., p. 8) occasion this rejoinder. I write as an individual NBS staff member who has served as chairman of committees concerned with research at the bureau.

Clearly the title of Kolata's article is ambiguous, as a "fall from grace" can be (i) a descent from a state of felicity or (ii) a loss of place in the pleasure of another. The content of the article appears to be consistent with meaning (i), while the letter from Willenbrock and Davis (correctly) denies the applicability of meaning (ii), as evidenced by the (undisputed) assignment of 15 new tasks by Congress to NBS in the past 10 years. The nature of these assignments (whose value is not questioned) has been such that the associated work has been concentrated in the NBS institutes headed, until recently, by Willenbrock and Davis. This has quite naturally led to a measure of vigor in those institutes.

Unfortunately the new (and urgent) congressional assignments were made during a period of essentially static funding and severe personnel constraints at NBS. Response to these mandates was made at significant cost to the health of some of the long-term efforts already under way. Much of this discipline-oriented (but also urgent) long-term work is centered in the two other NBS institutes, whose programs, as a result, have been weakened and, in some cases, terminated.

That such a condition bodes ill for the eventual health of NBS has been widely recognized. The quotes Kolata obtained from the senior NBS managers indicate that they perceive the problem in rather stark terms. For obvious reasons, their statements are more circumspect than, but entirely consistent with, those of the Statutory Visiting Committee, which has the duty of reporting to the Secretary of Commerce on the adequacy of the bureau's efforts and programs. (The members of the visiting committee are identified in Kolata's article.)

This year's report by the chairman of the Statutory Visiting Committee states: "NBS has critical problems"; is on the "brink of serious trouble"; and "persistent retrenchment that has taken place threatens to bring NBS to a mediocrity that is unacceptable." The committee sees the additional assignments as having "forced NBS leadership into defensive management, whereby long-range programs are sacrificed to salvage shortterm objectives." The predominant source of information for the members of the visiting committee is NBS management itself. It therefore appears that the pessimistic view of the present state of NBS conveyed by Kolata's article is more in accord with reality than the optimistic picture one might derive from the letter of Willenbrock and Davis.

In truth, those areas of NBS which are best known to the community of science have suffered considerable damage over the past several years. [The thoughtful letter from Michael N. Alexander (7 Oct., p. 8) rightly emphasizes that this has happened in other government (and industrial) laboratories.] Recent events, including the proposal of a radical reorganization of NBS, offer hope that an opportunity is at hand to reverse or at least mitigate some of the more devastating trends of the last decade. My sense of the institution is that this comes none too soon but not yet too late. There remains at NBS a cadre of scientific workers who have an appreciable culture in their disciplines, residual commitment to the institution, and even a measure of hope for its future.

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# **Recombinant DNA Guidelines: Scientific and Political Questions**

An article in the News and Comment section of the 22 July issue of Science (p. 348) includes a summary of the spring meetings of the National Institutes of Health Recombinant DNA Advisory Committee. An observer is quoted as writing that the committee members "often mocked their own restrictions," and three statements by committee members are cited in support of this interpretation: "These high levels are political, not scientific"; "P4 was designed to prevent research"; and "P1 is a laboratory plus a bureaucrat." As a member of the committee, I would like to comment.

While perhaps mocking in tone, these are profound statements about some of the problems faced by the committee. In the proper sense of the word "political," meaning the setting of policy, the guidelines are indeed political, and not scientific. This is a most crucial point. The scientific question is, What is the estimated

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